

REMARKS/ARGUMENTS

Claims 1-12 are pending in the application. Claims 1, 5, and 9-12 are amended herein. The Applicant hereby requests further examination and reconsideration of the application in view of the foregoing amendments and these remarks.

In paragraph 2 of the office action, the Examiner rejected claims 1-12 under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Poggio. For the following reasons, the Applicant submits that all of the now-pending claims are allowable over the cited references.

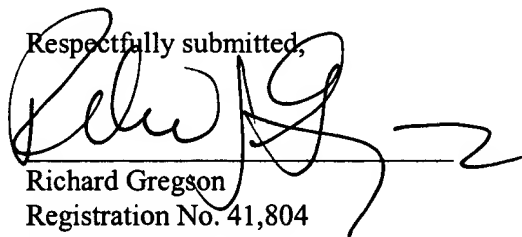
Currently amended claim 1 is directed to a head-related transfer function (HRTF) model for use with 3D sound applications. The HRTF model comprises a plurality of Eigen filters, a plurality of sets of spatial characteristic function (SCF) samples, and a plurality of regularizing models. The sets of SCF samples are derived from one or more HRTFs and are adaptively combined with the plurality of Eigen filters. Each regularizing model is adapted to regularize a different set of the SCF samples based on a different smoothness factor prior to the respective combination with the plurality of Eigen filters to provide a plurality of head-related transfer functions with controllable degrees of smoothness. Each different smoothness factor trades off between smoothness and localization for the corresponding set of SCF samples.

The Applicant submits that the cited references do not teach or even suggest such a combination of features. In particular, the cited references do not teach the use of a different smoothness factor by a corresponding regularizing model for a different set of SCF samples, where each different set of SCF samples corresponds to a different Eigen filter. As such, the Applicant submits that claim 1 is allowable over the cited references. For similar reasons, the Applicant submits that claims 5 and 9-12 are allowable over the cited references. Since the rest of the claims depend variously from claims 1 and 5, it is further submitted that those claims are also allowable over the cited references. The Applicant submits therefore that the rejections of claims under Section 103(a) have been overcome.

In view of the above amendments and remarks, the Applicant believes that the now-pending claims are in condition for allowance. Therefore, the Applicant believes that the entire application is now in condition for allowance, and early and favorable action is respectfully solicited.

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